



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/614,490	07/11/2000	Fearghus O'Foghludha	9105-21-IP	2050

20792 7590 04/22/2002

MYERS BIGEL SIBLEY & SAJOVEC
PO BOX 37428
RALEIGH, NC 27627

EXAMINER

HARTLEY, MICHAEL G

ART UNIT

PAPER NUMBER

1616

DATE MAILED: 04/22/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/614,490

Applicant(s)

O'FOGHLUDHA, FEARGHUS

Examiner

Michael G. Hartley

Art Unit

1616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Art Unit: 1616

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 2 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The term "large area" in claim 2 is a relative term, which renders the claim indefinite. The term "large" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. It is unclear what is meant by a large area source and what size is encompassed or required thereby.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in-

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or

(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

Claims 1, 2 and 4 are rejected under 35 U.S.C. 102(b) as being anticipated by Suthanthiran (US 5,163,896).

Suthanthiran discloses a integral source material (i.e., a radioactive seed) comprising a nuclide that is "activatable" by exposure to radiation, wherein the nuclide is chemically bound to a polymer, see

Art Unit: 1616

column 3, lines 10+, wherein ^{125}I is chemically bound to a polyamino acid. While ^{125}I is a radioactive isotope, it is still within the scope of "activatable" (as shown by claim 4, which includes I as the nuclide). Further, ^{125}I is "activatable" because it can be further "activated" into other I isotopes. Suthanthiran discloses that the seeds include various isotopes (including those set forth in claim 4), see column 6, lines 32-45.

Claims 1-4 are rejected under 35 U.S.C. 102(e) as being anticipated by Park (US 6,152,869).

Park discloses a integral source material (i.e., a radioactive seed) comprising a nuclide that is "activatable" by exposure to radiation, which is bound to a polymer (e.g., carrier) to form a radioactive polymer, see column 5, lines 10+. The nuclide can be one that is activatable by irradiation, including those claimed, see column 6, lines 30-48. The polymers include nylon, polyurethane, etc., as claimed, see column 6, lines 51-48.

Claims 1-4 are rejected under 35 U.S.C. 102(e) as being anticipated by Eury (US 5,871,436).

Eury discloses a integral source material (i.e., a radioactive seed) comprising a nuclide that is "activatable" by exposure to radiation, which is chemically bound to a polymer (i.e., base material), see column 4, lines 21+. The nuclide may be bound to various polymers, including, polyurethane, etc., as claimed, see column 4, lines 21-60. Eury discloses that various isotopes may be employed, which would be encompassed by "activatable" as claimed.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 1616

Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over either one of Suthanthiran (US 5,163,896) or Eury (US 5,871,436) in view of either one of Park (US 6,152,869) or Good (US 5,342,283).

Suthanthiran and Eury disclose an integral source material (i.e., a radioactive seed) comprising a nuclide, wherein the nuclide is chemically bound to a polymer, as set forth above.

Suthanthiran and Eury fail to specifically disclose that the nuclide is one that is activated (e.g., made radioactive) after preparation of the seed. However, it is well known in the art of radioactive seeds, that starting with an activatable isotope provides increased safety and preparation as shown by Park and Good.

Park discloses that the nuclide can be one that is activatable by irradiation to provide the advantage of preparing the seed without having to manipulate radioactive material, thereby increasing both safety and ease of preparation, e.g., column 6, lines 30-48.

Good discloses radioactive seeds which may comprise various nuclides and teaches the use of nonradioactive isotopes which can be later activated into radioactive form as equivalents to radionuclides, e.g., to provide easier preparation, see column 3, lines 4+.

It would have been obvious to one of ordinary skill in the art to use a nuclide which is activatable in the radioactive polymer based seeds disclosed by Suthanthiran and Eury because it is well known in the art that the use of a radioactivatable nuclide (e.g., a radionuclide precursor) may be used in radioactive seeds as equivalent to radionuclides for easier and safer preparation. One of ordinary skill in the art would have been motivated to use an activatable nuclide because it provides the clear advantages of increased safety in the preparation of the seeds, as well as, increased shelf life (since the seed can be stored until activation--without radioactive decay concerns).

Double Patenting

A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process ... may obtain a patent therefor ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894);

Art Unit: 1616

In re Ockert, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer cannot overcome a double patenting rejection based upon 35 U.S.C. 101.

Claims 1, 3 and 4 are provisionally rejected under 35 U.S.C. 101 as claiming the same invention as that of claims 1, 6 and 7 of copending Application No. 09/506,611. This is a provisional double patenting rejection since the conflicting claims have not in fact been patented.

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claim 2 is provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 2 of copending Application No. 09/506,611. Although the conflicting claims are not identical, they are not patentably distinct from each other because the both set of claims are drawn to overlapping devices listed in Markush format. It would have been obvious to one of ordinary skill in the art to form any of the devices as claimed in both applications using the integral source, which would arrive at the same invention as the copending application (e.g., same devices having the same components). Claim 2 of the instant application only includes additional devices in the claim.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Conclusion

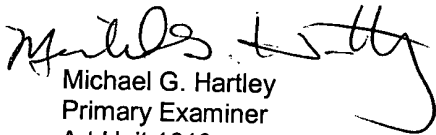
No claims are allowable at this time.

Art Unit: 1616

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael G. Hartley whose telephone number is (703) 308-4411. The examiner can normally be reached on M-F, 7:30-5, off alternative Mondays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jose G. Dees can be reached on (703) 308-4628. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-4556 for regular communications and (703) 308-4556 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1235.


Michael G. Hartley
Primary Examiner
Art Unit 1616

MH
April 18, 2002